City of Fresno H13

### **SURVEY PARTY TECHNICIAN**

### Class Definition

Under supervision, performs survey and layout work on engineering and mapping projects in the field and in the office.

## **Distinguishing Characteristics**

Survey Party Technician is a skilled class in the Survey Party series. Incumbents perform survey and layout work in the field and in the office. Work is reviewed for technical accuracy and skill by a Survey Party Chief. This class is distinguished from Engineering Aide II in that incumbents of that class act as a rod and chain person on a survey crew. It is distinguished from Survey Party Chief in that incumbents of that class are responsible for the supervision and training of a survey party.

# **Typical Tasks**

(This list of samples of job duties and responsibilities is neither inclusive nor exclusive. Consequently, this information may not reflect Essential Functions for this class.)

Calculates moderately complex engineering computations.

Operates surveying equipment, such as electronic total stations with data collectors and levels during the performance of boundary location, topographic surveys, construction staking, and other engineering and land survey work.

Performs inspection surveys.

Prepares drawings, either preliminary to additional survey work or as a guide to draftsmen or engineering designers.

Reduces survey notes and prepares and maintains field maps.

Performs layout work for construction of roads, bridges, canals, and other facilities.

Uses a computer and surveying software to perform survey calculations and prepare drawings of surveys.

Performs related duties as required.

#### Knowledge, Abilities, and Skills

Knowledge of the principles, practices, and instruments used in surveying.

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Knowledge of proper care and adjustment of surveying instruments. Knowledge of trigonometry as applied to survey computation and calculations.

Knowledge of construction specifications, plans, and regulations relating to Public Works projects.

Knowledge of engineering maps and records and drafting nomenclature and symbols.

Knowledge of surveying/engineering software.

Ability to efficiently use a computer in computer aided drafting operations.

Ability to accurately and efficiently set up and operate surveying instruments.

Ability to perform precise survey work, make engineering computations, and reduce field notes.

Ability to understand and work from oral and written instructions and sketches.

Ability to establish and maintain effective working relationships with co-workers, contractors, and the public.

Ability to physically withstand long working hours in the field under occasional adverse weather conditions.

Skill in the set-up and use of surveying instruments and related equipment.

## Minimum Qualifications

Completion of six (6) semester units of accredited college or university course work in plane surveying and three (3) semester units in trigonometry; and two years of experience in surveying in the field which included using theodolites, levels, tapes and application of engineering computations in performing boundary location, topographic surveys and construction staking. One additional year of qualifying experience may be substituted for the required plane surveying course work.

# Special Requirement

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	Director of Administrative Services		